

ABSTRACT OF THE DISCLOSURE

There is provided a semiconductor device including
a semiconductor substrate with a trench, and a
particulate insulating layer filling at least a lower
5 portion of the trench and containing insulating
particles. The semiconductor device may further
include a reflowable dielectric layer covering an upper
surface of the particulate insulating layer, the
insulating particles being stable at the melting point
10 or the softening point of the reflowable dielectric
layer.